



City of Columbus, Ohio

THIS IS NOT AN ORDER

Solicitation - 90 2010 SO035262

Respond before: 09/30/2010 9:00 am

Bid Contact :

Sue A. McQuirt
Dept of Finance/Purchasing Office
50 W Gay St 1st Floor
Columbus OH 43215 -
For inquiries call : (614) 645 7079 Fax : (614) 645 7051

GROUP	ITEM	QTY	DESCRIPTION
1	001	8.00 EA	Nozzles and Parts, Fire Hose

1) HOSE CONSTRUCTION

Hose meeting this specification shall consist of 100% synthetic high tensile yarn reinforcements circular plain woven so as to eliminate any left hand twist.

The woven reinforcement of the hose shall be totally encased in a matrix of ozone resistant nitrile/PVC rubber utilizing a single, THROUGH THE WEAVE EXTRUSION PROCESS, thereby eliminating the possibility of delamination.

The unitized finished product shall thereby optimize hydrostatic properties, abrasion resistance, and rubber to yarn adhesion.

2) LINING AND COVER PROPERTIES

When tested in accordance with the procedures listed in NFPA 1962-02 and other related standards, liner and cover shall have the following properties:

Ultimate Tensile Strength: Tensile strength of inner lining and cover rubber compound shall not be less than 1600 psi.

Ultimate Elongation: Ultimate elongation of inner hose liner and cover shall not be less than 400%.

Permanent Elongation: Permanent elongation of liner shall not be greater than 25%.

Accelerated Aging Test: When using conditions as listed in ASTM D1349-99, samples of the vulcanized rubber compound subjected to air oven aging at 100 degrees C for 70+-1/2 hour and then tested in accordance with ASTM D573-04 will exhibit a tensile strength of not less than 80% of the un-aged sample. The ultimate elongation shall be not less than 50% of the original value.

Adhesion: Adhesion between liner reinforcement and liner shall be a minimum of 15 lbs. When tested using NFPA 1961-02 procedure.

Ozone Resistance: Hose liner shall show no visible signs of cracking of liner or cover when tested in accordance with ASTM D1149-99 and ASTM D518-99, Procedure B 100 pphm/118 degrees F/70 hours.

Chalking: Hose finished to this specification shall not react adversely to environmental changes (chalking caused by exposure to sunlight).

Chemical Resistance: Exposure to seawater and contamination by most chemicals substances, hydrocarbons, oils, alkalis, acids and grease must have no effect on the short or long term performance of hose. Manufacturer shall provide standard Chemical resistance charts.

2.9 70% Nitrile/ 30% PVC. Must be made in the USA. Both hose jacket and liner must be made in the same factory.

3) SAFETY FACTORS

3.1 Abrasion Resistance Safety Factors: Abrasion resistance bears a direct relationship to the safe performance of the hose on the fire ground and as such will not be compromised. The Reciprocating Test (listed first) is felt to most closely reproduce the fire departments

Actual fire ground conditions and is therefore considered of prime importance to The purchasing authority. Hose meeting all the abrasion resistance safety factors listed below shall do so without exceeding the average weights listed in paragraph 5.3 of this specification.

3.1a Safety Factor to Damage U.L. Reciprocating Test. Safety factor to damage hose outer jacket shall withstand 7,000 cycles on a reciprocating abrasion tester as specified in U.L. Std. 219 resulting in no delaminating or damage to the reinforcing yarns. Hose so abraded shall comply with section 4.1 of this specification.

3.1b Safety factor to Exposure Tabor Test. Hose shall withstand 10,000 cycles on the Tabor abrasion machine H22 wheels, 1000-gram total load per wheel without any exposure of the synthetic reinforcement fibers.

Test to be performed in accordance with ASTM D3389-94. Wheels must be re-faced prior to commencement of

test.

3.2 Cold Resistance Factor: Cold resistance bears a direct relationship to the safe performance of the hose on the fire ground and as such will not be compromised. Hose meeting the cold.

Resistance listed below shall do so without exceeding the average weights listed in paragraph 5.3.

Hose shall have a capability of safe use down to -35 degrees F. Hose shall have no apparent damage to cover, or liner when subjected to the following cold bending test: A 50-foot length of dry hose as to be firmly coiled and placed in a cold box at -35 degrees F. for duration of 24 hours. Immediately after removal of hose from box, hose should be uncoiled and laid out by one operator. Following this procedure the hose shall not leak or show any damage to the reinforcement when subjected to hydrostatic acceptance test pressure as listed in item 4.1.

3.3 Heat Resistance Safety Factor: Heat resistance bears a direct relationship to the safe Performance of the hose on the fire ground and as such will not be compromised. Hose meeting the heat resistance safety factors listed below shall do so without exceeding the average weights listed in paragraph 5.3 of this specification. The hose when subjected to a static pressure of 100 psi shall be capable of safely withstanding a surface temperature of 1200 degrees F. for a minimum of 2 minutes without bursting. Heat resistance to be demonstrated on request of the purchasing authority.

4) PERFORMANCE CHARACTERISTICS

HYDROSTATIC TEST PRESSURES - The hose shall comply with NFPA 1961/1962-02.

Diameter 2-1/2" Acceptance Test 300 psi, Kink Proof 450 psi, Burst 900 psi.

5) GENERAL

5.1 Each hose to be fitted with a 2-1/2" aluminum, female cam & lock grove fitting on one end and a 2-1/2" aluminum male cam & lock grove fitting on the other end, double banded at a minimum.

5.2 Color; Red

5.3 Hose Size, Weight and Coil Diameter:

2-1/2" hose, average weight per 50 ft. uncoupled 28 pounds, coil diameter per 50 ft. =18 inches

6) QUALITY ASSURANCE PROVISIONS

6.1 Warranty - A Two Year Warranty required that the product be free of defects due to materials or workmanship, and provide for the repair or replacement of hose or couplings proven to have failed due to faulty material or workmanship.

1	002	6.00 EA	Nozzles and Parts, Fire Hose
	1-1/2" I.D. X 50 FT HOSE, KIDDE FIRE FIGHTING, FLEX-LINE FLOWMASTER ATTACK.		
	Specifications for this line item are exactly the same as in line one, except this line items asks for a 1-1/2" x 50 ft., instead of 2-1/2" x 50 ft..		

DELIVERY ADDRESS:

(See below)

Terms:

Pursuant to City of Columbus Code Section 3907.05, all contractors, including subcontractors, who are a party to a contract as defined in C.C. 3901.01, must hold a valid contract compliance certification number.

For information regarding contract compliance, please contact the Equal Business Opportunity Commission Office at (614) 645 - 4764.

Equal Opportunity Clause

- (1) The contractor will not discriminate against any employee or applicant because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment upgrading, demotion, or termination; rates of pay or other forms of compensation; and selection for training. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices summarizing the provisions of this Equal Opportunity Clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that the contractor is an equal opportunity employer.
- (3) It is the policy of the City of Columbus that business concerns owned and operated by minority and female persons shall have the maximum practical opportunity to participate in the performance of contracts awarded by the CITY.
- (4) The contractor shall permit access to any relevant and pertinent reports and documents by the Executive Director for the sole purpose of verifying compliance with this article, and with the regulations of the Equal Business Opportunity Commission Office. All such materials provided to the Executive Director by the contractor shall be considered confidential.
- (5) The contractor will not obstruct or hinder the Executive Director or her deputies, staff, and assistants in the fulfillment of their duties and responsibilities imposed by Article I, Title 39.
- (6) The contractor and each subcontractor will include a summary of this Equal Opportunity Clause in every subcontract. The contractor will take such action with respect to any subcontract as is necessary as a means of enforcing the provisions of the Equal Opportunity Clause.
- (7) The contractor agrees to refrain from subcontracting any part of this contract modification thereto to a contractor not holding a valid contract compliance number as provided for in Article I, Title 39.
- (8) Failure or refusal of a contractor or subcontractor to comply with the provisions of Article I, Title 39, may result in the cancellation of this contract.

DELIVER TO
DALE BARNES
940 DUBLIN RD
DIVISION OF WATER
COLUMBUS OH 43215 -